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EXAMINER

JERABEK, KELLY L

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2622

DATE MAILED: 10/06/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/047,022	Applicant(s) ITO, TAKEYOSHI	
	Examiner Kelly L. Jerabek	Art Unit 2622	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 May 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10, 12-23, 25 and 27-36 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 6 is/are allowed.
- 6) ☐ Claim(s) 1-5, 7-10, 12-23, 25 and 27-36 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 5/30/2006 has been entered.

Response to Arguments

Applicant's arguments with respect to claims 8, 12-14, 21 and 26 has been considered but are moot in view of the new ground(s) of rejection.

Applicant's arguments filed 5/30/2006 have been fully considered but they are not persuasive.

Response to Remarks:

Applicant's arguments (amendment pages 15-16) state that the Okino reference does not teach or suggest that an indicating device on a camera gives priority to an indication of one camera function over an indication of another camera function. The Examiner respectfully disagrees. Okino discloses a digital camera, comprising: an indicating device (5) arranged on a front of the digital camera (figure 5A), wherein the digital camera is capable of performing a self-timer image capturing function (col. 3, lines 53-65; col. 4, lines 15-23) and a moving image-capturing function (col. 1, lines 45-52; col. 4, lines 15-23; the voice recording mode records audio and video synchronously) and wherein the indicating device (5) indicates the self-timer image-capturing when the camera is performing self-timer image-capturing and indicates the moving image-capturing (recording video and audio synchronously) is taking place when the camera is performing moving image-capturing (col. 3, lines 53-65; col. 4, lines 15-23). Okino further states that LED driver (4) delivers drive pulses to vary the flashing of the LED (5). Okino states that the LED is flashed at different times and at varying intervals and priority is given to the different types of indication (start-1 flash, 5 seconds-1 flash, 7 seconds-2 flashes) in order to indicate the different stages of audio recording (start, 5 seconds, seven seconds) (col. 3, lines 53-65). Therefore, it would have been obvious for one skilled in the art to have been motivated to flash the LED indicator at different times and at varying intervals and give priority to all different modes of operation of the camera in the same way that intervals are varied and priority is given in the audio recording mode disclosed by Okino. Doing so would provide a means for notifying the user of which mode the camera is currently operating in.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1-5, 7-10, 12-23, 25 and 27-29 and 34-35 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Independent claim 1 states that indicating the external device communication function has priority over indicating the moving image-capturing function. This feature is not supported in the original specification of the application.

Independent claim 5 states that the first indicating device indicates a two-way communication with the external device and the indication of the two-way communication has priority over the indication of the self-timer image-capturing function. This feature is not supported in the original specification of the application.

Independent claim 8 states that the step of indicating the communications processing has priority over the step of indicating the self-timer image-capturing function. This feature is not supported in the original specification of the application.

Dependent claim 34 states that indicating the external device communication takes priority over indicating self-timer image capturing. This feature is not supported in the original specification of the application.

Dependent claim 35 states that indicating the external device communication takes priority over indicating moving image capturing. This feature is not supported in the original specification of the application.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-4, 8-10, 15-20, 27-28, 30-31 and 33-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Okino et al. US 5,214,516 in view of Aoi et al. US 2003/0169349.

Re claim 1, Okino discloses a digital camera, comprising: an indicating device (5) arranged on a front of the digital camera (figure 5A), wherein the digital camera is capable of performing a self-timer image capturing function (col. 3, lines 53-65; col. 4, lines 15-23) and a moving image-capturing function (col. 1, lines 45-52; col. 4, lines 15-23; the voice recording mode records audio and video synchronously) and wherein the indicating device (5) indicates the self-timer image-capturing when the camera is performing self-timer image-capturing and indicates the moving image-capturing (recording video and audio synchronously) is taking place when the camera is performing moving image-capturing (col. 3, lines 53-65; col. 4, lines 15-23). Okino further states that LED driver (4) delivers drive pulses to vary the flashing of the LED (5). Okino states that the LED is flashed at different times and at varying intervals and priority is given to the different types of indication (start-1 flash, 5 seconds-1 flash, 7 seconds-2 flashes) in order to indicate the different stages of audio recording (start, 5 seconds, seven seconds) (col. 3, lines 53-65). Therefore, it would have been obvious for one skilled in the art to have been motivated to flash the LED indicator at different times and at varying intervals and give priority to all different modes of operation of the camera in the same way that intervals are varied and priority is given in the audio recording mode disclosed by Okino. Doing so would provide a means for notifying the

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user of which mode the camera is currently operating in. However, although the Okino reference discloses all of the above limitations it fails to specifically state that the indicating device indicates that a battery charging is taking place when the camera performs battery charging.

Aoi discloses a digital camera including a display (54) capable of displaying the status of various camera operations. Aoi discloses that an LED displayed on the display portion (54) a battery charging state indication (page 3, paragraph 70).

Therefore, it would have been obvious for one skilled in the art to have been motivated to use the indicating device (5) of the camera disclosed by Okino to provide a battery charging state indication as disclosed by Aoi. Doing so would provide a means for notifying a user of a battery charging operation that is in progress.

Re claim 2, Okino discloses the indicating device indicates the operation situation of the second function by at least one of lighting, blinking and emitting colors (col. 3, lines 53-65; col. 4, lines 15-23).

Re claim 3, Okino discloses the second function further includes a voice recording function (col. 3, lines 53-65; col. 4, lines 15-23).

Re claim 4, Okino discloses the indicating device indicates the operation situation of the second function by at least one of lighting, blinking and emitting colors (col. 3, lines 53-65; col. 4, lines 15-23).

Re claim 8, Okino discloses a method for indicating a plurality of functions of a camera, comprising: an indicating device (5) arranged on a front of the digital camera (figure 5A), wherein the digital camera is capable of performing a self-timer image capturing function (col. 3, lines 53-65; col. 4, lines 15-23) and a moving image-capturing function (col. 1, lines 45-52; col. 4, lines 15-23; the voice recording mode records audio and video synchronously) and wherein the indicating device (5) indicates the self-timer image-capturing when the camera is performing self-timer image-capturing and indicates the moving image-capturing (recording video and audio synchronously) is taking place when the camera is performing moving image-capturing (col. 3, lines 53-65; col. 4, lines 15-23). Okino further states that LED driver (4) delivers drive pulses to vary the flashing of the LED (5). Okino states that the LED is flashed at different times and at varying intervals and priority is given to the different types of indication (start-1 flash, 5 seconds-1 flash, 7 seconds-2 flashes) in order to indicate the different stages of audio recording (start, 5 seconds, seven seconds) (col. 3, lines 53-65). Therefore, it would have been obvious for one skilled in the art to have been motivated to flash the LED indicator at different times and at varying intervals and give priority to all different modes of operation of the camera in the same way that intervals are varied and priority is given in the audio recording mode disclosed by Okino. Doing so would provide a means for notifying the user of which mode the camera is currently operating in. However, although the Okino reference discloses all of the above limitations it fails to

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specifically state that the indicating device indicates that a battery charging is taking place when the camera performs battery charging.

Aoi discloses a digital camera including a display (54) capable of displaying the status of various camera operations. Aoi discloses that an LED displayed on the display portion (54) a battery charging state indication (page 3, paragraph 70).

Therefore, it would have been obvious for one skilled in the art to have been motivated to use the indicating device (5) of the camera disclosed by Okino to provide a battery charging state indication as disclosed by Aoi. Doing so would provide a means for notifying a user of a battery charging operation that is in progress.

Re claim 9, Okino discloses that the indicating device is an LED (5).

Re claim 10, Okino discloses the step of indicating self-timer image-capturing function includes: operating the indicating device in a continuous manner for a first predetermined period of time when it is determined that a shutter button of the camera is fully depressed (col. 3, lines 43-65, first flash from LED); operating the indicating device in a blinking manner for a second predetermined period of time after the first predetermined period of time has elapsed (col. 3, lines 43-65, LED flashes at five seconds and seven seconds); and operating the indicating device in the continuous manner for a third predetermined period of time after the second predetermined period of time has elapsed (col. 3, lines 43-65, LED remains emitting during the last second of recording).

Re claims 15, 17 and 19, Okino discloses the step of indicating the moving image-capturing function includes: operating the indicating device in a blinking manner when it is determined that the camera is in a moving image recording mode (col. 3, lines 43-65, the voice recording mode, wherein audio and video are recorded synchronously, col. 1, lines 45-52); and ceasing operation of the indicating device when it is determined that that the camera is no longer in the moving image recording mode (col. 3, lines 61-62) because the LED turns off when recording has finished.

Re claims 16 and 18, Okino discloses that it is determined that the camera is no longer in the moving image recording mode when a shutter button of the camera is half-depressed or when a predetermined time has passed since a start of the moving image recording mode (col. 3, lines 1-7).

Re claim 20, Okino discloses it is determined that the camera is no longer in the voice memo mode when a back switch of the camera is on (fig. 2, element 2) and a predetermined time has passed since a start of the moving image recording mode (col. 3, lines 1-7).

Re claim 27, it is inherent that the steps of indicating communications processing, audio recording and voice memo processing are performed when the digital

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camera has already been externally turned on because the camera must be on in order to perform data processing operations.

Re claim 28, Okino discloses an LED flashes during recording the indicating device is configured to indicate the moving image-capturing function by blinking when the camera is in a moving image recording mode (col. 3, lines 52-65). Furthermore, it is implicit that the indicator ceases blinking when the camera is no longer in the moving image recording mode, e.g. when the camera is off.

Furthermore, Okino discloses the camera is no longer in the moving image-capturing function when a shutter button of the camera is half-depressed or when a predetermined time has passed since a start of the moving image recording mode since voice recording continues for a time interval (col. 3, lines 43-52) and the audio is synchronous with the video (col. 1, lines 45-51).

Re claim 30, Okino discloses a digital camera, comprising: an indicating device (5) arranged on a front of the digital camera (figure 5A), wherein the digital camera is capable of performing a self-timer image capturing function (col. 3, lines 53-65; col. 4, lines 15-23) and a moving image-capturing function (col. 1, lines 45-52; col. 4, lines 15-23; the voice recording mode records audio and video synchronously) and wherein the indicating device (5) indicates the self-timer image-capturing when the camera is performing self-timer image-capturing and indicates the moving image-capturing (recording video and audio synchronously) is taking place when the camera is

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performing moving image-capturing (col. 3, lines 53-65; col. 4, lines 15-23). Okino also states that the indicating device (5) may be used as a display for checking the battery (col. 4, lines 32-38). However, although the Okino reference discloses all of the above limitations it fails to specifically state that the indicating device indicates that a battery charging is taking place when the camera performs battery charging.

Aoi discloses a digital camera including a display (54) capable of displaying the status of various camera operations. Aoi discloses that an LED displayed on the display portion (54) a battery charging state indication (page 3, paragraph 70).

Therefore, it would have been obvious for one skilled in the art to have been motivated to use the indicating device (5) of the camera disclosed by Okino to provide a battery charging state indication as disclosed by Aoi. Doing so would provide a means for notifying a user of a battery charging operation that is in progress.

Re claim 31, Okino states that the indicating device (5) is configured to indicate that the self-timer image-capturing is taking place by lighting or blinking (col. 3, lines 53-65).

Re claim 33, Aoi discloses a digital camera that is capable of performing external device communication and also states that the display portion (54) is configured to indicate that the external device communication is taking place when the camera performs external device communication (page 3, paragraphs 68 and 90).

Re claims 34-35, Okino further states that LED driver (4) delivers drive pulses to vary the flashing of the LED (5). Okino states that the LED is flashed at different times and at varying intervals and priority is given to the different types of indication (start-1 flash, 5 seconds-1 flash, 7 seconds-2 flashes) in order to indicate the different stages of audio recording (start, 5 seconds, seven seconds) (col. 3, lines 53-65). Therefore, it would have been obvious for one skilled in the art to have been motivated to flash the LED indicator at different times and at varying intervals and give priority to all different modes of operation of the camera in the same way that intervals are varied and priority is given in the audio recording mode disclosed by Okino. Doing so would provide a means for notifying the user of which mode the camera is currently operating in. However, although the Okino reference discloses all of the above limitations it fails to specifically state that the indicating device indicates that a battery charging is taking place when the camera performs battery charging.

Re claim 36, Okino states that the digital camera is capable of performing voice recording and the indicating device (5) is configured to indicate the voice recording is taking place when the camera performs the voice recording (col. 1, lines 45-52; col. 4, lines 15-23; the voice recording mode records audio and video synchronously).

Claims 5, 7, 12-14, 21-23 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Okino et al. in view of Aoi et al. and further in view of Ohmura et al. US 2003/0011702 .

Re claim 5, Okino discloses a digital camera, comprising: an indicating device (5) arranged on a front of the digital camera (figure 5A), wherein the digital camera is capable of performing a self-timer image capturing function (col. 3, lines 53-65; col. 4, lines 15-23) and a moving image-capturing function (col. 1, lines 45-52; col. 4, lines 15-23; the voice recording mode records audio and video synchronously) and wherein the indicating device (5) indicates the self-timer image-capturing when the camera is performing self-timer image-capturing and indicates the moving image-capturing (recording video and audio synchronously) is taking place when the camera is performing moving image-capturing (col. 3, lines 53-65; col. 4, lines 15-23). Okino further states that LED driver (4) delivers drive pulses to vary the flashing of the LED (5). Okino states that the LED is flashed at different times and at varying intervals and priority is given to the different types of indication (start-1 flash, 5 seconds-1 flash, 7 seconds-2 flashes) in order to indicate the different stages of audio recording (start, 5 seconds, seven seconds) (col. 3, lines 53-65). Therefore, it would have been obvious for one skilled in the art to have been motivated to flash the LED indicator at different times and at varying intervals and give priority to all different modes of operation of the camera in the same way that intervals are varied and priority is given in the audio recording mode disclosed by Okino. Doing so would provide a means for notifying the user of which mode the camera is currently operating in. However, although the Okino reference discloses all of the above limitations it fails to specifically state that the

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indicating device indicates that a battery charging is taking place when the camera performs battery charging.

Aoi discloses a digital camera including a display (54) capable of displaying the status of various camera operations. Aoi discloses that an LED displayed on the display portion (54) a battery charging state indication (page 3, paragraph 70).

Therefore, it would have been obvious for one skilled in the art to have been motivated to use the indicating device (5) of the camera disclosed by Okino to provide a battery charging state indication as disclosed by Aoi. Doing so would provide a means for notifying a user of a battery charging operation that is in progress. Although the combination of the Okino and Aoi references discloses all of the limitations above it fails to state that the camera is mounted to a cradle comprising power and communications terminals.

Ohmura discloses a digital camera mounted to a cradle (fig. 1, element 5); the cradle has a terminal to communicate with an external device carrying out two-way communication (fig. 2, element 5f, power supply connector, IEEE 1394) and a power output terminal (fig. 2, element 5f, power supply connector) to output a direct voltage source (fig. 2, element 5e); the digital camera carries out two-way communication with the external device via the cradle (fig. 5, element 6d); the digital camera has a charging function of charging a battery in the digital camera by the direct voltage source input from the power output terminal of the cradle when power of the digital camera is off (fig. 7, steps S164-S168). One of ordinary skill in the art would have provided a digital camera with a cradle comprising power and communication terminals in order to

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recharge the camera's batteries and connect the camera to a display (fig. 1, element 2). As a result, it would have been obvious to one of ordinary skill in the art at the time of the invention to have provided a digital camera mounted to a cradle; the cradle has a terminal to communicate with an external device carrying out two-way communication, and a power output terminal to output a direct voltage source; the digital camera carries out two-way communication with the external device via the cradle; the digital camera has a charging function of charging a battery in the digital camera by the direct voltage source input from the power output terminal of the cradle when the power of the digital camera is off in order to recharge the camera's batteries and connect the camera to a display.

Re claim 7, Okino discloses an LED displaying a self-timer image capturing function (col. 3, lines 53-65; col. 4, lines 15-23); and the battery charge level (col. 5, lines 3-8). Okino does not disclose that communication with the external device is indicated by the first indicating device when the power of the digital camera is on. Ohmura discloses a camera docking stations comprising an LED (fig. 4, element 5i) that indicates communication (fig. 6, step S155) and charging (fig. 7, step S167). In view of the teaching of the Okino, Aoi and Ohmura references it is clear that one of ordinary skill in the art would have known to configure the multi-function LED of Okino to indicate communication with the external device in order to display a state of communications (Ohmura: fig. 6, step S155) while eliminating the necessity of providing an additional LED on the docking station. As a result it would have been obvious to one of ordinary

skill in the art at the time of the invention to have enabled the first indicating device to indicate when the power of the digital camera is on and the camera is communicating data with the external device in order to display a state of communications while eliminating the necessity of providing an additional LED on the docking station.

Re claim 12, the combination of the Okino and Aoi references discloses all of the limitations of claim 8 above. Additionally, Okino discloses displaying a battery charge level (col. 5, lines 3-8). However, the combination of the Okino and Aoi references does not disclose the step of indicating the battery charge processing function includes: operating the indicating device in a continuous manner until it is determined that the battery is fully charged; and ceasing operation of the indicating device when it is determined that the battery is fully charged. However, Ohmura discloses an LED for displaying a charging state of a digital camera (fig. 4, 5i), wherein the LED blinks in a continuous manner until it is determined that the battery is fully charged (figure 7, step 167); and ceasing operation of the indicating device when it is determined that the battery is fully charged (fig. 7, step S169) because the LED stops blinking and remains illuminated when the battery is fully charged. One of ordinary skill in the art at the time of the invention would have operated the indicating device in a continuous manner until it is determined that the battery is fully charged; and ceasing operation of the indicating device when it is determined that the battery is fully charged in order to display a battery charge state to a user. As a result, it would have been obvious to one of ordinary skill in the art at the time of the invention to have operated the indicating device in a continuous

manner until it is determine that the battery is fully charged; and ceasing operation of the indicating device when it is determined that the battery is fully charged in order to display a battery charge state to a user.

Re claim 13, the combination of the Okino and Aoi references discloses all of the limitations of claim 8 above. Additionally, Okino further discloses the step of indicating the communications processing function includes: operating the indicating device in a blinking manner when it determined that the camera is in communication with an external device (fig. 6, step S155); operating the indicating device in an intermittent manner when it is determined that the camera may be disconnected from communication with the external device (fig. 8, step S101) because the LED blinks during transmission and communication may be interrupted by determination of the user at any time during communication; and ceasing operation of the indicating device when it is determined that the camera is disconnected form communication with the external device because it is clear that when the camera is disconnected, the LED would not be blinking because the camera is no longer transmitting data in the communications mode.

Re claim 14, Ohmura discloses that the communication processing occurs via IEEE 1394, i.e. firewire (fig. 5, element 6d). Ohmura does not disclose the communication processing occurs via a USB bus. However, Official Notice is given of the equivalence of IEEE 1394, i.e. firewire and USB for their use in communications

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between a digital camera and external device and the selection of any of these known equivalents to perform communications with a digital camera would have been within the level of ordinary skill in the art at the time of the invention. As a result, it would have been obvious to one of ordinary skill in the art at the time of the invention to have performed communication processing via USB because IEEE 1394, i.e. firewire, is a known equivalent to USB for performing communications with a digital camera.

Re claims 21, 22 and 25, the combination of the Okino and Aoi references discloses all of the limitations of claims 1 and 8 above. Additionally, Okino discloses displaying a battery charge level (col. 5, lines 3-8). However, the combination fails to state that the battery charging function takes place when the camera has already been externally turned off.

However, Ohumura discloses charging a camera comprising a rechargeable battery (fig. 2, docking station 5 and rechargeable battery 6b). One of ordinary skill in the art would have provided a camera comprising a rechargeable battery in order to provide a portable power. It would have been obvious to one of ordinary skill in the art at the time of the invention to have provided a docking station and rechargeable battery in order "to prepare for instant use of the digital camera" (paragraph 71). Furthermore, it is inherent in the case where the camera battery has fully discharged, causing the camera to be in a powered off state, that the battery charging function takes place when the camera has already been externally turned off.

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Re claim 23, it is inherent that the camera must be on in order to carry out the two-way communication with the external device.

Claim 29 is rejected under 35 U.S.C. 103(a) as being unpatentable over Okino et al. in view of Aoi et al. and further in view of Matsuo US 6,526,293.

Re claim 29, the combination of the Okino and Aoi references discloses all of the limitations of claim 1 above. Additionally, Aoi discloses that an LED display displays a battery charge status . However, the Okino and Aoi references do not disclose that the indicating device is configured to indicate the battery charging function by operating in a continuous manner until the battery is fully charged and ceasing operation when the battery is fully charged.

However, Matsuo discloses that during battery charging, an LED is turned on so as to inform a user of charging (col. 1, lines 19-21); and a charge operation mode informs a user of charging by varying the intensity of light. One of ordinary skill in the art would have configured an LED to vary in intensity in order to inform a user of a charging condition. As a result, it would have been obvious to one of ordinary skill in the art at the time of the invention to have operated a battery charging indicator by operating in a continuous manner until the battery is fully charged and ceasing operation when the battery is fully charged in order to inform a use of a charging condition.

Claim 32 is rejected under 35 U.S.C. 103(a) as being unpatentable over Okino et al. in view of Aoi et al. and further in view of Kawamura US 5,784,105.

Re claim 32, the combination of the Okino and Aoi references discloses all of the limitations of claim 30 above. However, the combination fails to specifically state that the digital camera is configured to perform the battery charging function when the digital camera is manually turned off.

Kawamura discloses a video camera including a built-in secondary battery. Kawamura states that when a battery charger (8) is connected to the video camera body (1) if the main switch (4) is in its off state the supply of electric power from the battery charger (8) acts to charge the secondary battery (2) (col. 4, lines 28-45). Therefore, it would have been obvious for one skilled in the art to have been motivated to charge a battery in the digital camera disclosed by the combination of the Okino and Aoi references only when the camera is turned off as disclosed by Kawamura. Doing so would provide a means to allow all the power supplied from a battery charger to be used to charge the battery.

Allowable Subject Matter

Claim 6 is allowed.

The following is an examiner's statement of reasons for allowance:

Re claim 6, the prior art fails to teach or suggest, "A digital camera, wherein: the digital camera has a self-timer image-capturing function; the digital camera is mounted to a cradle; the cradle has a terminal to communicate with an external device carrying out two-way communication, and a power output terminal to output a direct voltage source; the digital camera carries out two-way communication with the external device via the cradle; the digital camera has a charging function of charging a battery in the digital camera by the direct voltage source input from the power output terminal of the cradle when power of the digital camera is off; and the digital camera comprises a first indicating device which is arranged on a front of the digital camera, indicates a situation in self-timer image-capturing by at least one of lighting and blinking, and indicates a charging situation by the charging function, wherein the digital camera further comprises a second indicating device which is arranged on a rear of the digital camera and indicates the charging situation by the charging function; and a detecting device which detects mounting/non-mounting of the digital camera to the cradle, **wherein when the detecting device detects mounting to the cradle, the charging situation of the digital camera is indicated by the first indicating device, and when the detecting device detects non-mounting to the cradle, the charging situation of the digital camera is indicated by the second indicating device on the rear of the camera**".

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably

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accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

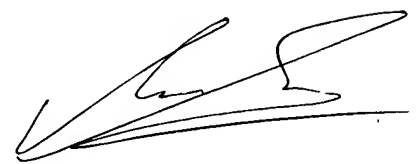
Contacts

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kelly L. Jerabek whose telephone number is (571) 272-7312. The examiner can normally be reached on Monday - Friday (8:00 AM - 5:00 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vivek Srivastava can be reached on (571) 272-7304. The fax phone number for submitting all Official communications is (703) 872-9306. The fax phone number for submitting informal communications such as drafts, proposed amendments, etc., may be faxed directly to the Examiner at (571) 273-7312.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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